

PERCEPTIONS ON URBAN-BASED GARDENING IN THE CITY OF ISABELA, BASILAN, PHILIPPINES

^{1*}Bendijo, S.A., ²Rebuza, A.O., ³Pedillon, J.M., ⁴Amilbahar, G.V., ⁵Tabal, E.P.

^{1,2,5}Faculty, Agricultural Sciences Department, College of Agriculture, Western Mindanao State University, Zamboanga City, Philippines.

³Graduate Student, College of Agriculture, Western Mindanao State University, Zamboanga City, Philippines.

⁴Faculty, Agricultural Extension Department, College of Agriculture, University of Southern Mindanao, Kabacan, Cotabato, Philippines.

*Corresponding Author

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ABSTRACT

Urban agriculture provides the potential to deliver fresh, locally produced food to urban populations. Gardens have the potential to significantly affect the well-being of urban populations, as evidenced by their restorative capacity, most notably in providing areas for recuperation from everyday life, encouraging social relationships, and improving food security in times of need [14]. This study explores the perception of the community on the urban-based gardening in the City of Isabela; specifically, a) the level of awareness of urban community on the Urban Gardening (UG), b) the factors influencing and hindering the urban communities in implementing urban gardening; and, c) the type of urban gardening and vegetable that these urban communities want to establish, adopt, or implement-maintain. The research offers an important insight into the degree of awareness among respondents, which is traced to food security and environmental sustainability issues. Positive determinants for the adoption of UG are perceived benefit to health, savings on costs, and social cohesion. Still, lack of interest and resource constraints hinder UG adoption. Conversely, UG forms preferred, such as rooftop gardens, and preferred vegetables indicate aspirations towards cost savings and nutrient content. These findings point to the need for specific interventions to overcome obstacles and facilitate UG adoption. Stakeholder cooperation is necessary to establish an appropriate environment for UG sustainability. In the end, UG presents itself as a viable solution for improving food security, environmental sustainability, and city

resilience in urban settings. More research is needed to further understanding and enable extensive UG use as a catalytic urban food production model.

Keywords: Basilan Province, City of Isabela, Perception, Urban-Based, and Urban Gardening

1. INTRODUCTION

Urban residents' well-being can be significantly impacted by gardens, as evidenced by their role in restoration, particularly in providing places to escape the everyday, their social function, and their contribution to food security during times of need [14]. The City of Isabela is a 1.5-hour sail from the coast of Zamboanga City, and with the help of RORO (Roll-On, Roll-Off), about 87% (from then 95.23%) of the vegetable consumed by the Isabelaños are imported from other parts of the country while the remaining 33% are domestically grown. It has been estimated that the local flea market, on average imports at least six (6) times a week, a total volume of 6,429.0 kg of vegetables (excludes vegetables sold in bundles or ties). Surprisingly, eighteen (18) of these can be grown in the City of Isabela [8;9]. Vegetables are edible plants or plant parts, such as leaves, stems, or seeds. They are low in calories, rich in vitamins, minerals, fibre, and antioxidants that help protect the body's cells. Regular intake of the recommended servings of vegetables supports overall health [4;5].

Economic development condenses in urban areas and cities, which accounts 75 to 80% in the Philippines' gross domestic product since 2000 [6]. A growing population increases the demand for food. The City of Isabela's population boomed from 112,788 [20] to 130,379 [21] comprising of 3.36% of the Zamboanga Peninsula's overall population. Population growth rates ramp from 2.74% to 3.10%. Urbanization is projected to follow, where existing agricultural lands will decrease by 72.31 ha. due to reclassification of land for other uses [10]. The city has an annual per capita consumption of 88.5 kg of rice. With a total population of 130,379 [20] the city needs 11,533,978.24 kgs or 11,533.98 metric tons (MMT) of rice annually. However, majority of the 86 hectares rice field has opted to shift vegetable production, primarily due to high cost of inputs and labor [9].

The World Health Organization recommends five (5) servings of fruits and vegetables, where 80 grams per serving, or 400 grams in a day, or 146 kg in a year, excluding starchy vegetables like potatoes, sweet potatoes, cassava and other starchy roots [28; 18]. There is a notable difference between the amount of vegetables people should consume, local per capita consumption says otherwise, where vegetable accounts for only 22.0 kg, 19.0 kg of roots and tubers, and 10.0 kg of beans, nuts, and seeds.

In the City of Isabela, ten (10) associations (including farmers and women's association) in nine (9) barangays implements Urban / Peri-Urban Community Gardens (supported by NUPAP

Program), while fifteen (15) out of forty-five (45) barangays implements HAPAG Program, while *Gulayan sa Paaralan* implementers in the city accounts to a total of forty-three (43) both urban and rural areas (Isabela City Agriculture Office – Field Operations and Extension Services Division – High Value Crops Section). In the City of Isabela as well as in many other cities, the opinions and assessments of local residents with regard to urban agriculture are not known. Urban agriculture has different perspective from different fields such as social, environmental, and economic. Participants who do not participate in various forms of urban and peri-urban agriculture are doubtful about the development of urban farming [20]. Due to various factors, implementation of urban agriculture in the city is challenging while the government addressed the issue through relentless support.

This study determined the perception of the selected barangays, regarding urban gardening, their challenges, and concerns about the practice, as well as their insights and suggestions. The data gathered also showed the influences as to what and why the community implemented and adopt urban gardening, the form of urban gardening based on the pre-determine factors. Consequently, this study also showed the kind of vegetables the community through the urban gardening produce, preferred to cultivate, and the market demand of vegetables grown under urban gardening. Furthermore, this study outlined the needs-analysis on capacity development and resource requirement of the community

2. MATERIALS AND METHODS

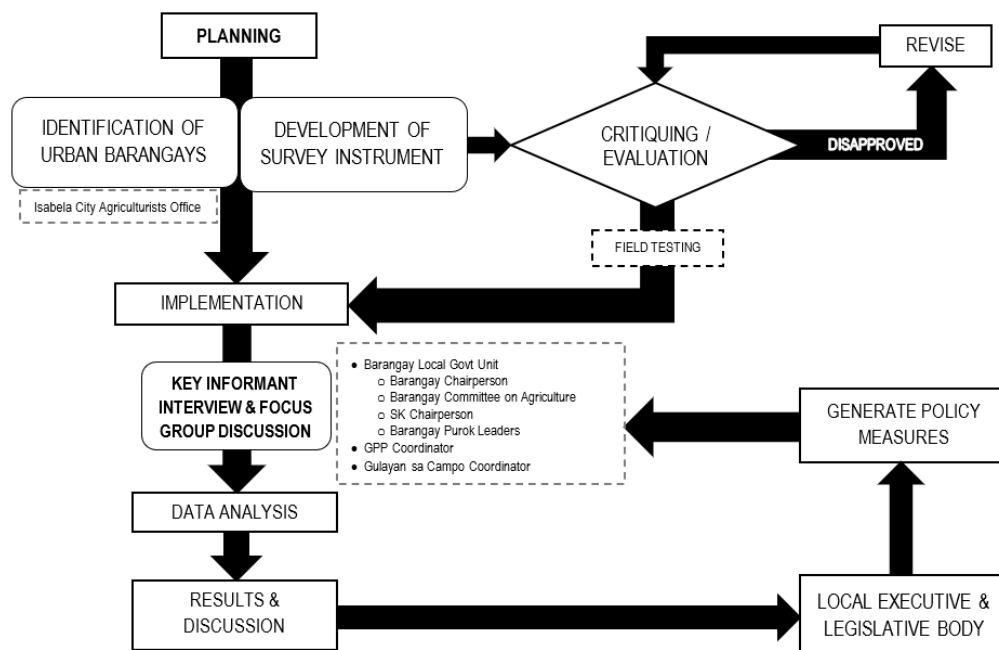


Figure 1: Methodological framework of the study

2.1 Methodological Framework

The study adheres to a systematic and participatory methodological framework to ensure that the findings obtained are reliable and useful for policy development. It started with the identification of selected urban barangays through the Isabela City Agriculturist Office, the development of a survey instrument, which had undergone expert review and revision when needed, and was subjected to a field test for clarity and validity. After which, data collection was conducted through key informant interviews and focus group discussions to include both quantitative information and the voices of the community in the data. Analyses of the collected data were presented in the results and discussion. From the results, policy measures were formulated and thereafter endorsed to the local executive and legislative bodies to inform evidence-based decision-making and program improvement.

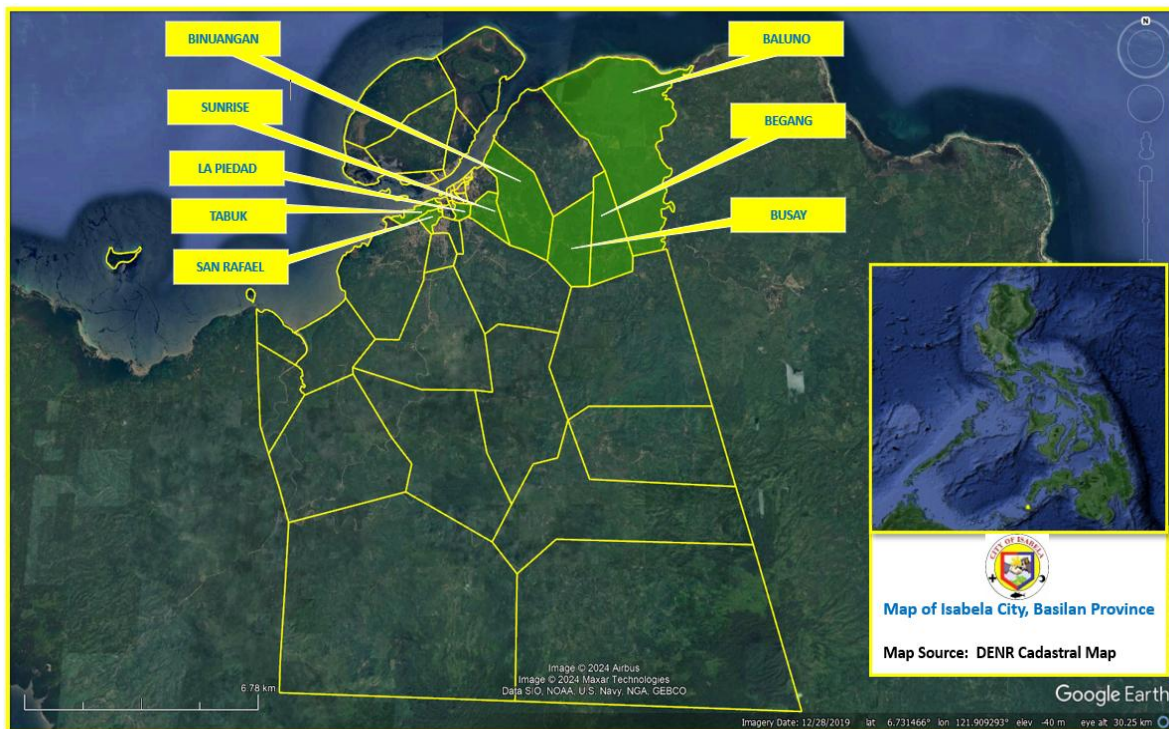


Figure 2: Map of the study sites.

2.2 Study sites

This study in collaboration with the Local Government Unit via the High Value Crop Section of the Field Operations and Extension Services Division of the Isabela City Agriculture Office, has identified eight (8) barangays that have adopted, are currently implementing, or have previously implemented the *Gulayan sa Barangay* Program.

2.3 Respondents

A total of fifty-six (56) participants were invited to the key informant interview and focus group discussion, with seven representatives from each barangay. This group included essential members of the identified Barangay Local Government Unit (BLGU), such as the Chairperson, representatives from the Agriculture Committee, the SK Chairperson, Purok Leaders, and the 4Ps Leader.

2.4 Data Collection and Analysis

Surveys through key informant interview and focus group discussion provides a solution to address the objectives of the research. The feedback gathered to the representatives of the selected barangays regarding their awareness and information about urban gardening, the benefits in adopting and implementing of urban gardening through *Gulayan sa Barangay* or community gardens, and ascertain the pre-determined factors towards urban gardening. This study conducted brief orientation, emphasizing their role in the activity, and their participation is based on their willingness and voluntarism. They were handed with the Informed Consent Form first which disclosing the activities' purpose, and that their responses are kept confidential and that their personal information will not be published in any shape or form except for responses in relation to their demographics (*age, gender, religion, civil status, household head, and members per household*), educational background, and their perceptions on urban gardening. The study used a multiple response survey questionnaire and check applicable pre-determined option. In analysing the data, the respondent's response was tabulated, and summed, then ranked to get the most number of pre-determined option. For open-ended questions, responses were grouped into categories and or commonness.

3. RESULTS AND DISCUSSION

Table 1: Demographic profile of respondents

Demographic Variable	Category	Number of Respondents	Percentage (%)
Gender	Male	29	52
	Female	16	29
	Did not answered	11	20
Age (years/old)	21-31	4	7
	32-41	15	27
	42-51	16	29
	52-61	6	11
	62 and above	13	23
	Did not answered	4	4
	Single	8	14

Demographic Variable	Category	Number of Respondents	Percentage (%)
Civil Status	Married	40	71
	Widowed	6	11
	Separated	2	4
Household Head	Yes	19	34
	No	25	45
	Did not answered	12	21
Number of Members per household	Male	86	Based on the 71% respondents
	Female	103	
	Did not answer	16	On an average 4 per household

Table 1 summarizes the demographic characteristics of the respondents, where the majority of the respondents are male (52%) and much of the respondents are aged between 42 – 51 (29%). Over 71 percent of the respondents are married, and 45 percent of respondents are not the household head. Female members per household holds the greatest number (55%) than the male (45%), with a margin of 10 percent.

The findings reflect a fairly even gender distribution among respondents, but with a marginal majority of males (52%). The majority (29%) of the respondents are in the 42 – 51-year age bracket, which tends to be linked with more work experience and decision-making ability. A majority of them (71%) are married, which reflects the prevalence of household units that focus on the family in the sample area. Also, 45 percent of the respondents are not household heads, possibly restricting making household decisions. The structure of the household shows that there is a predominance of females at 55 percent, compared to males' 45 percent, indicating that females have a pivotal role in the composition, labor participation, and caregiving responsibilities of the household [2]. As a rule, females also tend to take more initiative in performing the activities related to urban gardening, reflecting their active role in household food production and management [12]. These demographic attributes allow interpretation of the respondents' behavior, perceptions, and participation with relevance to the study.

Table 2: Respondent’s responses on urban gardening

Question	Yes	No	Did not answer	Frequency	Respondents (%)	If yes, source of information
Have you heard of Urban Gardening (UG)?	44	11	1	24	54.5	Government Agencies
				13	29.5	Broadcasting / Social Media Platforms
				7	15.9	Word of Mouth

Table 2 presents the respondents’ awareness of urban gardening and their sources of information. Out of 56 respondents, 44 (78.6%) reported that they had heard of urban gardening, while 11 (19.6%) had not, and one (1.8%) did not provide an answer. This only means that urban gardening has already gained considerable visibility and exposure within the community. The fact that the majority of the respondents are aware of urban gardening indicates that the concept of urban gardening is no longer considered new or unfamiliar to the population. Furthermore, of the said number of people aware of urban gardening, more than half of them or 54.5% referred to government institutions such as the Department of Agriculture (DA), the Agricultural Training Institute (ATI), and the Department of Social Welfare and Development (DSWD) as the source of their information on urban gardening through training, workshops, orientations, symposia, and fora. On the other hand, 29.5% of the number of people aware of urban gardening referred to broadcasting via social media such as television, radio, Facebook, Tiktok, and other related tools. Consultations and information dissemination via networking or people talking to people about urban gardening only accounted for 15.9%. The use of the said tools of information dissemination promotes the goal of enhancing the population's awareness and participation in the concept of sustainable food systems by influencing human behavior positively [26]. Such widespread awareness reflects the growing recognition of urban gardening as a practical and relevant strategy for food security, environmental sustainability, and household livelihood support.

Table 3: Respondents Age x Awareness of Urban Gardening

Respondents Age	Awareness on the Urban Gardening		Total
	Aware, n (%)	Not Aware, n (%)	
21 – 31	4 (100.0)	0 (0.0)	4
32 – 41	11 (78.6)	3 (21.4)	14
42 – 51	14 (82.4)	3 (17.6)	17
52 – 61	4 (57.1)	3 (42.9)	7
62 and above	11 (91.7)	1 (8.3)	12
Total	44 (81.5)	10 (18.5)	54

Note: Fisher’s Exact Test indicated no significant association between the respondents age and awareness of urban gardening ($p=0.410$). Effect size was small (Cramer’s $V = 0.291$).

Awareness of urban gardening did not significantly differ across age groups. Fisher’s Exact Test showed no statistically significant association between respondent’s age and awareness of urban gardening ($p=0.410$). Although awareness was generally high across all age categories, the observed differences were not statistically meaningful. The strength of association was small to moderate (Cramer’s $V = 0.291$).

Table 4: Household Status x Awareness in the UG

Household Head	Aware	Not Aware	Total	$p<0.05$	$p<0.01$
Yes	19	0	19	0.2468	0.2468
No	22	3	25		
Total	41	3	44	<i>Not significant</i>	<i>Not significant</i>

Household head status was not significantly associated with awareness of urban gardening. Fisher’s Exact Test showed no statistically significant relationship between the two variables ($p=0.247$), with a small effect size (Cramer’s $V = 0.236$). Fisher’s exact test indicated no significant association between household head status and the awareness of UG. Although all household heads reported being aware of urban gardening, this difference was not statistically significant when compared with non-household heads. The absence of a significant association suggests that awareness of urban gardening is not strongly influenced by household head status. This indicates that exposure to information about UG may be relatively uniform regardless of household leadership roles.

Table 5: Urban gardening implementation in the barangay

Questions	Response					
	Yes	No	Did not answer	If YES, yes?	Frequency	Respondents (%)
Does your barangay implement UG?	50	2	4	UG saves money	45	90
				UG Products are healthier and fresh	42	84
				UG improves relationship w/ neighbours	38	76
				UG augments household income	37	74
Is UG still existing until now?	49	2	5	Benefits the community	42	95
				BLGU provides support	35	80
				BLGU promotes UG	35	80
				BLGU supports government interventions	35	80
				Mandated by ordinance	35	80
				Provides barangay incentives and achievements	34	77

Table 5 presents the respondents' views on the implementation of urban gardening (UG) in their barangays. Of 56 participants, 50 (89.3%) assured that UG is in practice, and of these, 49 (98%) assured that the practice continues in their neighborhoods. In response to a question on why respondents started UG, the most prominent reasons included saving money (45), healthier pesticide-free and fresher produce vegetables (42), improving neighbor relations (38), and increasing household income (37). The fact that many people prefer pesticide-free and fresher produce corroborates the findings of [27]. The result suggests that urban gardening enhances community well-being based on food access, livelihood, health improvement, and social cohesion as highlighted by [19]. On the sustainability of UG, the following were responses made by respondents: its sustained operation was mostly because of the advantages it brings to the

community (42). Equally, 35 responses each were seen supporting barangay-level support, promotion, government intervention, and incentives as supportive factors in the sustainability of the initiative.

Table 6: Urban gardening practices and reasons

Questions	Response		
	Forms of UG	Frequency	Respondents (%)
Which of the following UG form does your community practice?	Plots	42	81
	Container	39	75
	Bags	30	58
	Raised beds	22	42
	Communal	16	31
Why do you think the community prefers this form of UG?	Reason, why?	Frequency	Respondents (%)
	Additional income	46	88
	Easy	45	87
	Clean	44	85
	Fresh air	43	83
	Convenient	41	79
	Cost-saving	41	79
	Cheap	41	79

Table 6 presents the forms of urban gardening (UG) practiced in the barangays. The most common forms reported were garden plots (42), container gardening (39), bag culture (30), raised beds (22), and communal gardens (16). Despite the fact that container gardening came second, it has some benefits based on its suitability for use in limited space, easy control of soil and water, and the ability to provide food and income for the growers [12]. Many barangays implement UG using a combination of two or more methods rather than relying on a single approach. When asked about the reasons for practicing specific forms of UG, most respondents cited its contribution to additional household income (46) by improving productivity [15]. However, other factors that may prompt people for UG include its convenience of use (45), cleanliness (44), provision of fresh air (43), and cost savings or cheapness (41), among many other reasons. As noted by [16], urban gardening serves as a vital source of both affordable and nutritious food options.

Table 7: Perceptions of locally produced vegetables

Question	Response		
	List of vegetables	Frequency	Respondents (%)
What kind of vegetables you're your community produce?	Camote tops (<i>Ipomea batatas</i>)	42	75
	Pechay (<i>Brassica rapa subsp. Chinensis</i>)	42	75
	Alugbati (<i>Basella alba</i>)	42	75
	Eggplant (<i>Solanum melongena</i>)	41	73
	Kangkong (<i>Ipomea reptans</i>)	39	70
	Mustasa (<i>Brassica juncea</i>)	37	66
	Tomato (<i>Solanum lycopersicum</i>)	34	61

Table 7 presents the types of vegetables cultivated in urban gardening. The most commonly grown were camote tops, pechay, and alugbati, each reported by 42 respondents. Eggplant followed closely with 41 responses, along with kangkong (39), mustasa (37), and tomato (34). Notably, three of the top five vegetables are leafy types, suggesting a preference for fast-growing, nutrient-rich crops. These crops are well suited to limited spaces and require low management input, making them suitable for urban gardening environments [11].

Table 8: Reasons for non-implementation of urban gardening

Questions	Reasons	Frequency	Respondents (%)
Which among these possible reasons do you think why a community does not implement UG?	Not interested	6	50
	Lack of technical know-how	3	25
	Weak extension services	2	17
	Impose risk of pollution from air	2	17
	Lack/limited access to water irrigation	2	17
	Do not have adequate seeds and tools	2	17

Table 8 presents the respondents' perspectives on why urban gardening (UG) is not implemented in some barangays. The most frequently cited reason was lack of interest among residents (6 responses), followed by limited technical knowledge (3). Other reported barriers, each cited by two respondents, included weak extension services, risks of air pollution, limited access to water, and inadequate supply of seeds and tools.

Table 9: Preferred vegetable products of the community

Question	List of vegetables	Frequency	Respondents (%)
Which vegetable products your community would like to buy?	Kangkong (<i>Ipomea reptans</i>)	44	88
	Pechay (<i>Brassica rapa subsp. Chinensis</i>)	43	86
	Mustasa (<i>Brassica juncea</i>)	39	78
	Camote tops (<i>Ipomea batatas</i>)	36	72
	Eggplant (<i>Solanum melongena</i>)	35	70

Table 9 lists the community's favorite vegetable products. Kangkong was most favored (44 responses), followed by pechay (43), mustasa (39), camote tops (36), and eggplant (35). Notably, four out of the top five most favourite vegetables are leafy kinds, revealing a strong community preference for leafy greens. This preference is supported by [17], who note that such vegetables provide livelihoods and generate income, particularly in the rural barangays of Isabela.

Table 10: Gender x type of farming in urban gardening

Gender	Type of Farming			Total
	Traditional, n (%)	Conventional, n (%)	Organic, n (%)	
Female	22 (39.3)	0 (0)	34 (60.7)	56
Male	5 (16.7)	10 (33.3)	15 (50.0)	30
Total	27 (31.4)	10 (11.63)	49 (56.97)	86

Note: Percentages are row percentages. Fisher's Exact Test indicated a statistically significant association between gender and type of urban gardening farming practice ($p < 0.001$). Cramer's $V = 0.509$.

Table 10 shows the distribution of expected farming practice for urban gardening by gender. Female respondents predominantly selected organic urban gardening f (60.7%) as a go-to farming practice when UG will be established by them, while male respondents were more represented across traditional (16.7%), conventional (33.3%), and organic (50.0%) practices. Fisher's Exact Test revealed a statistically significant association between gender and type of urban gardening farming practice ($p < 0.001$), suggesting that preferences for farming practices differ by gender. The practice of organic farming involves the use of native resources such agricultural biomass waste [7].

Table 11: Perceived effectiveness of government in promoting urban gardening

Question	Responses					
	Yes	No	Did not answer	Why?	Frequency	Respondents (%)
Is the government effective in promoting UG?	44	2	10	Lack of support	8	18
				Lack of Technical know-how	5	11
				Weak / strengthen monitoring	5	11
				Lack of irrigation	4	9

Table 11 presents respondents’ perceptions of government effectiveness in promoting urban gardening (UG). Most respondents (78.6%, n = 44) perceived government efforts as effective, while a few disagreed (3.6%, n = 2) or did not respond (17.9%, n = 10). Notable gaps included lack of support (n = 8), lack of technical expertise (n = 5), weak monitoring (n = 5), and lack of irrigation facilities (n = 4). These results indicate that, although government initiatives are generally appreciated, targeted capacity building and infrastructure improvements are essential to ensure the sustainable success of urban gardening programs.

Table 12: Preferred capacity-building provider of the community

Question	Responses					
	Yes	No	Did not answer	Why?	Frequency	Respondents (%)
Would you like to further enhance your knowledge in UG to avail from the government institution?	47	0	9	Local Government Unit (LGU)	47	100
				WMSU- College of Agriculture	27	57
				Private Vegetable Grower	16	34
				Others	10	21

Table 12 presents the respondents’ preferred providers of capacity-building programs on urban gardening (UG). Of the 56 respondents, 47 expressed interests in further enhancing their knowledge and skills. The majority identified local government units (LGUs) as their preferred providers followed by the Western Mindanao State University–College of Agriculture (27 responses) and private vegetable growers (16). By implementing policies and partnerships that convert idle spaces into productive green areas, Local Government Units (LGUs) are responsible for enhancing urban gardening [13]. The projects further enhance the strengthening of food

security, the development of environmental sustainability, the support of community participation, and the assistance in economic growth at the local level.

Table 13: Preferred government assistance of the community

Question	Assistance to Avail	Yes	Respondents (%)
What other government assistance would you like to avail from the government	Seeds	51	94
	Fertilizers	48	89
	Seedling trays	41	76
	Others		
	Garden tools	29	54
	Soil	5	9
	Irrigation Facility	5	9

Table 13 indicates what types of government support are needed by the community to finance urban gardening activities. Out of the 54 participants, 51 reported needing seeds, followed by fertilizers (48), seedling trays (41), garden tools (29), soil (5), and irrigation facilities (5). The need for seeds and fertilizer dominated the responses, and this shows the importance of these inputs in maintaining urban gardening activities at the community and individual vegetable growers. This demand for vegetable seeds shows how important they are for the initiation and sustenance of production activities, as noted by [3]. In addition, the demand for fertilizer shows how important it would be to revive plant growth by improving the fertility of the soil, as noted in [1].

4. CONCLUSION & RECOMMENDATION

This study adds to the increasing literature on UG by examining the level of awareness, the implementation mechanism, and the preferences of residents in urban areas. The findings confirm that UG is a practical and resilient approach for improving urban food production and strengthening community well-being. This study shows that awareness of UG is generally high. However, differences in its continued implementation, type of farming practice, and stakeholder engagement show an institutional and operational gap rather than demographic constraints. Although UG provides a practical approach to support urban food production and community well-being, its wider implementation is limited by technical knowledge, inadequate input and resource access, and weak institutional support.

The findings indicate that the continuity of UG is not primarily due to the demographic characteristics. It shows a strong connection to the presence of program support, active barangay leadership, and consistent access to technical information and guidance. This was elements were manifested in some areas of the study and have shown UG initiatives' stability and strong

community participation. In contrast, with weak support systems, UG implementation becomes irregular and dependent on individual effort rather than structural support.

National policy frameworks exist that provides legal basis for agricultural initiatives. The Local Government Code of 1991 (Republic Act No. 7160) mandating local government units (LGUs) to promote general welfare and support agricultural development within their jurisdictions [22]. Likewise, the Agriculture and Fisheries Modernization Act (Republic Act No. 8435) and the Organic Agriculture Act (Republic Act No. 10068, as amended) emphasized on the sustainable food production, local capacity building, and community-led agricultural systems [23; 24; 25]. The observed gaps points not to the policy support, rather to the challenges of perceived inconsistent local-level implementation and institutionalization.

To address such gaps, practical interventions are recommended.

For Local Government Units (LGUs), it is acknowledged that the City Government of Isabela has integrated UG as part of a holistic intervention for its local food security, nutrition, and environmental initiatives. The following are recommended to further strengthen its implementation and sustainability. UG must be institutionalized down to the barangay-level, such as the enactment of ordinances ensuring continued support beyond leadership transition. Consistent with the authority granted to barangays under the RA 7160, to enact measures promoting agriculture and community welfare [22]. This ensures sustainability and continued implementation of UG initiative-programs.

The City Agriculturist Office may establish a systematic technical support mechanism or strengthen its existing capacity building, monitoring and evaluation activities, and technical information dissemination and guidance. Development of a starter kits composed of seeds, soil media, and basic UG tools may be rollout, creating a uniform support program. Encourage BLGUs to allocate budget provisions for maintenance and expansion of their UG Project. Such budget allocation may be integrated into the barangay Annual Investment Plan. Aligning UG with the local development and food security priorities.

For barangay communities, the establishment of functional urban committees can streamline coordination and implementation, and their sustained participation. At the household level, promotion of applicable UG Practices is area-specific, such as in densely populated areas, and the use of containers, bags, and other small-space gardening should be promoted to expand its reach. Sangguniang Kabataan and schools can increase youth engagement through school-led garden activities, enhancing lifelong skills, and UGs sustainability. Demonstration gardens may serve as shared learning spaces, where residents can access, share and practice UG techniques.

For policymakers and legislative bodies, a clear city-wide policy framework recognizing UG as a local food security strategy should be communicated. Institutionalize and establish an incentive mechanism for top-performing barangays, such that recognizing programs or additional funding support to encourage a sustained and possibly expanding implementation. Strengthening partnerships among national agencies, state universities (SUCs), local universities and colleges (LUCs), non-government institutions, and private sector may improve input supply chains, provision technical assistance, induce research-driven collaborations and solutions, and monitoring mechanisms.

The study shows that a thriving and sustainable UG initiative requires policy institutionalization, strategic technical assistance, consistent resource support, and instilling community ownership. Short-term promotion does not guarantee its sustained and continued implementation and is therefore insufficient. Strengthening presence through governance integration and capacity-building at the barangay level will improve resilience and expand its long-term contribution prompting a long-lasting impact to household food security, environmental management, and community's well-being. Continued research and multi-sectoral collaboration is as important in strengthening inclusive and sustainable food systems.

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